

Laha nā Mea Hou o Ko‘olau Poko

Bringing the News of Ko‘olau Poko

April/May, 2002

Volume 2, Issue 2

Testing Ko‘olau Poko’s Water with New Indicators

You are invited to network

Mon. Jun. 3 - 9:30 -10:30 am

Ko‘olau Poko Networking Meeting at Camp Kokokahi’s Makai Room in Kāne‘ohe.

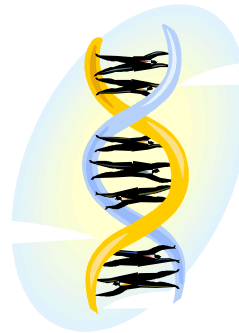
This meeting is open to anyone interested in improving water quality in the Ko‘olau Poko watershed and is an opportunity to learn about ongoing projects.

For more information contact Liz Harrington, KBAC Education Coordinator, at 926-6191 or email her at kailua3111@aol.com

Numerous outbreaks of illnesses worldwide have been traced to waterborne bacteria or pathogens that enter the body through eating or skin cuts. Since the late 19th Century, the water industry has detected and counted “indicator” bacteria by exposing water samples to nutrients, incubating the samples, and encouraging growth of bacteria that usually live in the human gut. If these “coliform” bacteria grow, they must have come from feces (“poop”), and the water is then considered contaminated.

Flaws in current techniques make this indicator system unreliable. For example, waterborne bacteria have the ability to survive for long periods by going

“dormant” (go to sleep). Such cells are not found by normal culture methods used in current microbiological examinations. It is estimated that 99% of organisms in local samples remain undetected using traditional culture methods.



According to Dr. Maqs Alam, a professor in the University of Hawai‘i’s Department of Microbiology, and a KBAC contractor, results of water quality tests in Kailua Bay indicate raised bacterial counts when the mouth of

Ka‘elepulu Stream is opened and the water flows into the bay. Some of the pollution can be traced back to Ka‘elepulu Pond and Kawai Nui Canal and its poor circulation. (continued on page 2)

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How to Use the Convenience Refuse Centers

The City and County has Convenience Refuse Centers around the county to dispose of certain trash. The Centers’ rules greets visitors at the entrance. This can feel unfriendly, causing many to dump their rubbish beside the road instead of learning the rules. Here is a simple summary of the Center’s process and rules:

- They are open 7 days a week from 7 am to 6 pm to dispose of trash.
- A guard directs users to appropriate trash bins.

There are three trash bins, one each for green waste, *burnables*, and *non-burnable* material.

What is green waste, burnable, or non-burnable waste?

- Green waste includes all yard clippings, grass, palm fronds, and any other plant material.
- Burnables are all the rest of household rubbish, including wood.
- Non-burnables are any type of metal or glass.

Convenience Centers **do not take:**

- paint, oil, pesticides, chemicals, or poisons, and other flammable material, because they are considered hazardous

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New Indicators, continued from page 1

Dr. Alam explains that storm drains in the Enchanted Lake area had 10 times the bacteria levels of the lake and Ka'elepulu Stream, and that pollution indicators increase dramatically during rainstorms. Dr. Alam's findings lead to the conclusion that Kailua Bay's water quality is affected more by land-based (runoff) influences than by the sewage effluent outfall. Using molecular biology techniques, such as Polymerase Chain reaction (PCR), Dr. Alam can determine whether the source of the bacteria is human or is a result of land-based runoff which may include animal sources.

whose DNA sequences (codes) differ and these differences can identify a specific virus or bacteria.

With funding from KBAC, Dr. Alam will develop a field test kit and a database on his PCR research in Ko'olaupoko. In addition, he will train 20-24 high school students in the Ko'olau Poko watershed to detect six primary pathogens in local waters using PCR technology and to field test the sampling. Dr. Alam's work provides local students exposure to cutting-edge "from lab to real life" research. To learn more about the specific sites where Dr. Alam is testing and his findings, check out KBAC's website at www.kbac-hi.org under the GIS link. This new technique is important in reducing negative health impacts from polluted water because it can detect organisms traditional methods can not.

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By using the PCR water sampling technique, Dr. Alam can detect various types of bacteria such as: *Escherichia coli*, *Staphylococcus aureus*, *Salmonella spp.*, *Vibrio spp.*, *Shigella spp.*, and *Enterococcus spp.* in local waters. Each organism has a different DNA signature. While some genes can be the same or similar among organisms, there will always be genes

KBAC Member Honored as Environmental Hero

Christine Woolaway, a member of KBAC, has been named a 2002 environmental hero by The National Oceanic and Atmospheric Administration for her work as a Hawai'i Sea Grant Coastal Recreation and Tourism extension agent.

Fisheries Service, and other government and private organizations. Christine credits the collaborative effort of all the parties willing to work together for the project's success and



hopes the project sets an example for others to work together in achieving their environmental goals.

Christine is the coordinator of the annual Get the Drift and Bag It! program and helped organize the removal of marine debris from the Northwestern Hawaiian Islands. She worked in collaboration with the Coast Guard, Navy, National Marine

KBAC congratulates Chris on her national recognition for all her environmental achievements and thanks Chris for her contributions to KBAC as a volunteer member since its creation.

Organize a Community Park Clean-up

For those interested in cleaning up a neighborhood or beach park, call Clint Jamile at the City & County Parks and Recreation Office at 692-5852. Clint can help turn a community spirit into visible neighborhood improvements. Let Clint know which park, the date, time, and the number of volunteers. The City and County of Honolulu will provide trash bags, and Clint gives on-site safety presentations to groups cleaning beach parks.

Community Calendar . . . Get Involved

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Sat. May 4 - Kawai Nui Heritage Foundation invites you to Chants and Traditional Stories of Kawai Nui Marsh. For more information, contact Chuck "Doc" Burrows at: 595-3922, pager: 581-2922, cburrow@aloha.net

Sat. May 18 - 8:30 am - 2:00 pm 'Ahahui Malama i ka Lokahi invites the public to kokua and malama **Kawai Nui Marsh** and to help with its service project. For more information, contact Chuck "Doc" Burrows at: 595-3922, pager: 581-2922, cburrow@aloha.net

Wed. May 22 6:45 pm Kailua Bay Advisory Council business meeting at Windward Community College, Hale Alaka'i, Room 118. KBAC takes public comments at the start each meeting. Those interested in providing more information may do so by calling Maile Bay, 225-9210 or mbay@hawaii.rr.com

Mon. June 3 - 9:30 - 10:30 am Ko'olau Poko Networking Meeting, Camp Kokokahi, Makai Room, **Kāne'ohe**. All persons interested in improving water quality and learning more about ongoing projects in the Ko'olau Poko watershed are welcome. For more information contact Liz Harrington, KBAC Education Coordinator, 926-6191 or kailua311@aol.com

Sat. June 15 - 8:30 am - 2:00 pm 'Ahahui Malama i ka Lokahi invites the public to kokua and malama Kawai Nui Marsh and to help with its service project at **Holomakani Heiau**. For more information, contact Chuck "Doc" Burrows at: 595-3922, pager: 581-2922, cburrow@aloha.net

Sat. July 20 - 8:30 am - 2:00 pm 'Ahahui Malama i ka Lokahi invites you to kokua and malama Kawai Nui Marsh and to help with its service help with its service project at **Na Pohaku o Hauwahine**. For more information, contact Chuck "Doc" Burrows at: 595-3922, pager: 581-2922, cburrow@aloha.net

For additional events, check out the Community Calendar on-line at www.kbac-hi.org

FUNDING OPPORTUNITIES:

The Department of Health is soliciting Request For Proposals (RFP) No. CWB-PRC 02-01 for polluted runoff control projects for Fiscal Year 2002 Section 319(h) grant funding. Projects must implement a portion and/or accomplish an activity in the State's Coastal Nonpoint Pollution Control Management Plan, Volume I dated June 1996 and/or the State's Implementation Plan for Polluted Runoff Control dated July 2000. At a minimum, grant funds must be matched 100% with match funding or in-kind contributions from non-federal sources. Specific criteria for projects are listed in the RFP which can be found on-line at www.state.hi.us/health/eh/cwb/prc/index.html. **Proposals are due by May 31, 2002.** If you have any questions relating to the RFP, please call Ms. Lawana Collier or Mr. Colin Tanaka at (808) 586-4309.

NOAA's Ocean and National Marine Fisheries Services are jointly seeking proposals under the Coral Reef Conservation Grant Program, as authorized by the Coral Reef Conservation Act of 2000. Applications are sought from a broad array of governmental and non-governmental entities to promote the conservation of coral reef ecosystems in both the United States and abroad. In FY 2002, the Program will provide funds to support several program areas, including: State and Territory Coral Reef Management; State and Territorial Coral Reef Monitoring and Research to Support Monitoring Technologies; General Coral Reef Conservation; Projects to Improve or Amend Coral Reef Fishery Management Plans; and International Coral Reef Conservation. **Proposals are due by 5:00 p.m. EDT, on May 24, 2002.** For more information see: <http://www.coralreef.noaa.gov>

A permit is required

for 1 cubic yard or

greater (equal to

size of 1 pickup

truck load).

Dumping rubbish

less than 1 cubic

yard is littering, also

an illegal activity.

Convenience Refuse Centers, continued from page 1

wastes. To dispose of these, call City & County Household Hazardous Waste at 523-4774.

- rocks, concrete, appliances, or dead animals. Rock and concrete have to go to the Waimanalo Gulch solid waste facility in Nanakuli. To dispose of appliances and dead animals, call City & County Bulky Item Pick-up at 262-4346 in Kailua and Waimanalo and 247-3553 in Kāne'ohe.

Call the Center and to ask if it takes small furniture, batteries, large appliances, tires, air conditioning units, and propane tanks

Centers telephone numbers and locations:

Waimanalo: 259-7182, Hihimanu Street just past Waimanalo District Park.

Lai'e: 293-8714. on Cane Haul Road near the City & County yard.

The Kapa'a Transfer Center is located on Kapa'a Quarry Road. It has the same rules as the Convenience Centers, but is a larger facility with different hours. It is open daily from 7:00 a.m. to 4:30 p.m. For more information about the Kapa'a Transfer Center call 262-4248.

Many people do not know one needs a permit to dump rubbish on public or private land. A permit is required for 1 cubic yard or greater (equal to size of 1 pickup truck load). Dumping rubbish of less than 1 cubic yard is littering, also an illegal activity. Dumping litter and other trash can have serious health impacts. Call the Department of Health's Solid and Hazardous Waste Branch at 586-4226 to report it.



Kailua Bay Advisory Council

Kailua Bay Advisory Council

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Laha nā Mea Hou o Ko olau Poko is published bi-monthly and is available in an electronic format. For an electronic copy, email your request to kailua311@aol.com or check it out on the web at www.kbac-hi.org

Laha nā Mea Hou o Ko olau Poko is distributed by the Kailua Bay Advisory Council, an organization working to improve water quality in the Ko olau Poko watersheds.

WE'RE ON THE WEB!

[HTTP://WWW.KBAC-HI.ORG](http://www.kbac-hi.org)

Waimanalo Community Shows Ko'olau Poko How It's Done

On Saturday, March 16th, the Waimanalo Community set an "A+" example of stewardship. The community's success on Saturday led to cleaning up some more Sunday. The Waimanalo Clean Up Coalition organized the community for one of the biggest clean up efforts since 1988.

More than 600 community volunteers, including youth groups, farmers, churches, businesses, prisoners, and individuals, removed a 1,000 tires, 75 junk cars, and **TONS** of trash from along roadsides

and streams.

The Kailua Bay Advisory Council congratulates the Waimanalo community for its outstanding efforts to reduce pollution and educate people about the harmful effects of litter and improper rubbish dumping. The Waimanalo community demonstrated that the most effective work gets done when people come together as neighbors committed to improving their community with aloha.



Interested in organizing a community clean up? See "Organize a Community Park Clean-up" on page 2.